

BNL- ESH&Q- SHSD- Job Risk Assessment

Job Number: SHSD-JRA-011 Job Title: Chemical Management System work in field & warehouse	Point Value → Parameter ↓	1	2	3	4	5
Job Description: Lifting, opening, moving, re-taping chemical container packages, applying bar codes, recording data.	Frequency (B)	≤once/year	≤once/month	≤once/week	≤once/shift	>once/shift
Name(s) of Specific Application Risk Team Members: T. Blydenburgh, D. Adika. J. Wojciechowski, R. Petricek, R. Selvey	Severity (C)	First Aid Only	Medical Treatment	Lost Time	Partial Disability	Death or Permanent Disability
Training Procedures List (Optional): Applicable Standard Operating Procedures: SOP IH77200	Likelihood (D)	Very Unlikely	Unlikely	Possible	Probable	Multiple
Approved by: R. Selvey Date: 04/04/05 Rev. #: 0						
Stressors (if applicable, please list all) Lighting; walking surface conditions		Reason for Revision (if applicable):			Comments:	

		Without Controls					Before Additional Controls						After Additional Controls								
Activity	Hazard	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Loading & unloading CMS equipment into vehicles	Ergo sprains, strains, slips/trips	1	5	5	3	75	listing handles on cases, shoulder straps, low weight of equipment	Y	1	5	2	2	20								
Travel to and from the CMS inventory site	JRA for vehicular travel						--	-	-	-	-	-	-								
Walking into and out of buildings and within building	See Walking JRA						--	-	-	-	-	-	-								
Site hazards at existing lab facilities	Chemical and radiological exposure to site hazards	1	3	2	4	24	Gloves for surface and air contaminants, RWP, container owner handles high hazard bottles, odor detection, Training on hazards and CMS rules, lab hoods used for volatile chemicals	N	1	3	2	3	18								

BNL- ESH&Q- SHSD- Job Risk Assessment

		Without Controls					Before Additional Controls						After Additional Controls								
Activity	Hazard	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
	falls when accessing container location	1	3	3	3	37	ladder safety; authority to refuse hazardous location access	N	1	3	3	3	27	IH Group to purchase step ladder for team to have in case of poor access	N	1	3	2	1	6	75 %
	natural hazards in the environment-bees, asbestos, heat, vectors	1	2	2	1	4	PPE such as barrier to insects, sprays, respiratory protection in crawl spaces	Y	1	2	2	1	4								
Site hazards at T-100 receiving facility	Chemical and radiological exposure to site hazards; dry ice in received packages	1	5	3	2	30	Gloves for surface contaminants, cold gloves, Training on hazards and CMS rules, work area design and containment, working with un-opened containers.	N	1	5	2	1	10								
Lifting of boxes, containers, packages, equipment, etc. (weight up to 40 pounds [19 kg])	Overexertion injuries from excessive lifting, pushing, pulling, holding, carrying	1	5	2	3	30	proper lifting technique, gloves and supportive shoes, handle holds built into load, lift single bottle instead of full case	N	1	5	2	3	30	IH Group to purchase stool to assist in sustaining squatting position in lieu of bending	N	1	5	1	1	5	85 %
	Injury from falls while moving with obstructed view	1	5	2	4	40	floor maintenance; good footwear; housekeeping, assistant (spotter)	Y	1	5	2	3	30								
	Strain/sprain injury from bending or loss of balance without falling	1	5	2	4	40	proper lifting technique, gloves and supportive shoes, handle holds built into load	N	1	5	2	3	30								
	Cuts and abrasions	1	5	1	4	40	gloves and supportive shoes, handle holds built into load	N	1	5	1	3	15								
	Being struck by dropped load	1	5	2	3	30	gloves and supportive shoes, handle holds built into load, lifting rules, training	N	1	5	2	3	30	Safety shoes required for gas cylinder handling	N	1	4	1	3	12	60 %

BNL- ESH&Q- SHSD- Job Risk Assessment

		Without Controls					Before Additional Controls						After Additional Controls								
Activity	Hazard	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Moving and hold objects with extended arm reach	Muscle strain in arm and backs, spinal injury in back	1	5	2	3	30	Lifting rules, training, use of step stools, use of assistance in lifting and holding, handles built into object, load move close to body for extended periods of holding, tables or platforms use to eliminate muscle fatigue	N	1	5	2	3	30								
Handling containers to apply barcode labels in existing labs	Chemical exposure from residues or dropped bottles	1	5	2	3	30	Training and experience on hazards and CMS rules, coated acid bottles, Gloves, researcher handles hazardous containers, odor detection, lab hoods used for volatile chemicals, containment trays, Eyewash and showers	N	1	2	2	2	8	Investigate feasibility of edge guard to catch dropped vials/small bottles							
	Explosion/rupture of container	1	5	5	3	75	Gloves, PPE for shock sensitive equipment, researcher handles hazardous containers, lab hoods sash barrier	N	1	2	5	3	30	Specific Training of time sensitive, shock sensitive, peroxide forming material		1	2	5	2	20	33
Handling containers to apply barcode labels at T-100 Receiving Warehouse	Chemical exposure from residues or dropped bottles	1	5	2	3	30	Containers are new and un-opened, Bill of Lading identifies contents, training on hazards and CMS rules, Experience and training, coated acid bottles, gloves for surface contaminants, containment trays, Eyewash and showers	N	1	5	2	2	20								
	Explosion/rupture of container	1	5	5	2	50	Containers are new and un-opened, Bill of Lading identifies contents, training on hazards and CMS rules, Experience and training, coated acid bottles	N	1	5	5	1	25								
Entering Data into computers	Repetitive Motion injury, eye strain	1	4	3	3	36	Work station reviews, design of equipment, adjustable chairs, work breaks	N	1	4	2	2	16								

BNL- ESH&Q- SHSD- Job Risk Assessment

Further Description of Controls Added to Reduce Risk:

SHSD IH Group Policy on minimum PPE for IH Group members for this task is set at: Safety Glasses with Side Shields, Safety Shoes (and Hard hat for construction areas).

Lesson Learned from this Risk Assessment:

1. IH Group needed more hazard specific chemical hazard training for CMS field team members.

*Risk:	0 to 20	21 to 40	41-60	61 to 80	81 or greater
	Negligible	Acceptable	Moderate	Substantial	Intolerable